ABSTRACT OF THE DISCLOSURE

An adhesive or sealant composition for use in alternating magnetic fields includes fiber based heating agents which have remarkably and unexpectedly high heating efficiencies. The fibers operate efficiently at lower field intensities; at lower frequencies and with smaller diameters (related to skin depths) than prior art technologies. The fibers may be formed from a variety of ferromagnetic materials, including, for example: iron, nickel, cobalt, chromium and alloys thereof. The preferred materials group is: carbon steel, magnetic stainless steel, nickel, ferromagnetic coated electrically conductive materials, ferromagnetic coated electrically nonconductive materials. The fibers are sized, in accordance with skin effect theory, to heat effectively at a frequency substantially higher that the actual frequency to be utilized. The fibers have lower apparent density and/or smaller diameters and/or higher surface areas and/or substantially higher heating efficiency than powder of the same ferromagnetic composition for operation at a given frequency.